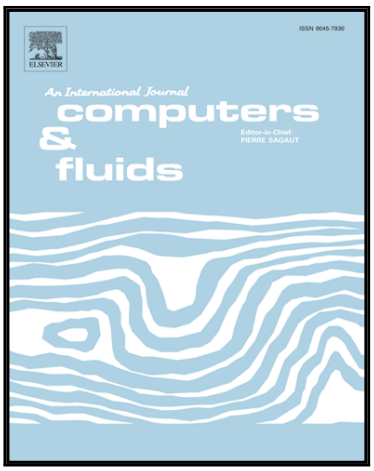

Numerical Evaluation of Turbulent Flow Structures in a Stirred Tank with a Rushton Turbine based on Scale-Adaptive Simulation

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Highlights

- URANS SAS approach is proposed in a stirred vessel simulation.
- Predicted velocity and turbulent kinetic energy profiles are validated by experiment.
- Pressure waves with different convective velocities are found.
- The instability frequencies are identified by the FFT of the pressure signal.
- SAS model captured more turbulent structures